

APRIL 13, 1989
NARRATIVE FOR
TRIPP COUNTY, SOUTH DAKOTA
OIL AND GAS DEVELOPMENT POTENTIAL MAP

INTRODUCTION:

Tripp County is located in the southcentral part of the state. It covers T. 95-103 N., Rgs. 74-78 W., 6th Principal Meridian. The White River controls the north county line and Mellette and Todd Counties are to the west. The state line forms the southern county line. The topography is rolling hills and open grasslands.

Regional geology shows the Cretaceous age Pierre Shale to cover the northern half of the county with the Miocene Arikare Formation exposed at the surface in the south (Darton, 1951). Structurally, the Pre-Cambrian basement rock varies from -700 to -200 feet below mean sea level across the county. The regional dip in the county is east to southeast (Steece, 1961). There have been only 16 wells drilled in the entire county, and only 3 in the past 15 years. Currently there is no production in the county.

There are no Indian lands within this county.

OCCURRENCE POTENTIAL:

All of Tripp County is classified as moderate occurrence potential. This is based on the presence of a sedimentary package of Paleozoic and Cretaceous age rocks that are estimated to be 2,000 to 5,000 feet thick (Mallory, 1972), and there is no established production within the county.

The type log for this county is the #1 Swedlund, sec. 11, T.102 N., R 78 W.. The well was drilled in 1964, spudded in the Pierre Shale and reached maximum depth in the Pre-Cambrian at a structural elevation of -649 feet below sea level.

DEVELOPMENT POTENTIAL:

All of Tripp County is classified as moderate development potential. This is because the sediment package that is known to exist in this county contains potential source and reservoir rocks that produce elsewhere in the state, and possible structural or stratigraphic traps. But, because there is no production or no significance shows from the drilling that did occur, this county has only a moderate development potential.

Based on the past and current drilling activity in the county, it is expected to remain the same, with only one to three wells being drilled in this county in the next 15 years.

REFERENCES CITED

Darton, N. H., 1951, Geologic map of South Dakota: U. S. Geological Survey, scale 1:500,000

Mallory, W. W., (ed.) 1972, Geologic atlas of the Rocky Mountain Region: Rocky Mountain Association of Geologists, p.56.

Steece, F. V., 1961, Pre-Cambrian surface of South Dakota: South Dakota Geological Survey, Mineral Resource Investigation Map, No. 2, scale: 1 inch = 30 miles.